

Reliable Nutrition Information for Your Health

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“Calling All Couch and Computer Potatoes!”

by Ada Shultz Health Educator, California State University, Fullerton

We all know the drill: New Year’s Day rolls around and we are ready with our resolutions. We are really going to do it this time! This is the big year—not many folks have a chance to make millennium resolutions! Once every thousand years we’re going to keep our word, right? We are going to eat smarter—no more jumbo fries and greasy burgers, no more Krispy Kreme deep fried delights, no more whipped cream on the double lattes, maybe even cut back on those empty calorie colas with the kidney stone causing-phosphoric acid.

Oh yes, and exercise every day, even if it means purposely parking in the outer limits and hiking in to work or class! Okay, so what happened?

Statistics show that only 77 percent of New Year’s resolutions even survive the first week! A month later, it’s 55 percent. After six months, only 40 percent are holding on, and after two years, only 19 percent of people still cling to their resolutions.

Health experts in our country are exhorting Americans to get up from their chairs and couches and do something—anything— that resembles exercise!

How about walking, running, swimming, or stretching? One of every two Americans is obese or overweight. Statistics for Southern California, the land of milk and honey for fitness buffs, are barely better than the national average.

What are we to do? Give up and sink further into our sofas? Not a chance! Today is a new opportunity to get back on track! Don’t even think about waiting until next New Year’s to make more promises!

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Are we ready to give Herbal remedies to children?

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Continuing health problems due to adulteration, contamination, and misidentification of herbal and other dietary supplements leave little reason to entrust the health and safety of children to supplements instead of drugs. Herbal products are regulated as food products (following the passage of the Dietary Supplements Health and Education Act of 1994). Therefore, manufacturers are not required to have their products reviewed by the Food and Drug Administration before marketing.

Heavy metals, such as lead, zinc, mercury, arsenic, aluminum, and tin, and other substances have been found in contaminated herbal products. In 1998, the New England Journal of Medicine published an article that stated that the California Department of Health Services, Food and Drug Branch, initiated a study to screen imported Asian patent medicines for undeclared pharmaceuticals and heavy metal contamination. Of 260 products

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"Calling All Couch and Computer Potatoes!" (con't. from Page 1)

Start today with a new resolution, be good to yourself. Here's how:

- ✓Eat smarter, not necessarily less.
- ✓Eat real food, from nutritionally dense sources.
- ✓Eat more fruits and vegetables, more complex carbohydrates.
- ✓Check your portion size. Consider five or six mini-meals rather than three large ones.

The other half of the formula: regular exercise. No time for that, you say? Join us at the CSUF Titan track every Tuesday, Wednesday, and Friday from 12:00 to 1:00 pm or any local track or YMCA for an hour of fresh air and exercise!

The Power Lunch with Ada program is up and running (okay, most of us walk!).

- ✓Why walk? Walking a mile in 15 to 20 minutes per day could burn 36,500



calories

over a year, enough to reduce your weight by about 10 pounds, even with no other changes.

- ✓Too hot? Umbrellas are available to carry for shade protection!
- ✓Not fashionable? Neither is obesity.

- ✓Walking is too boring? So is sitting at a desk.
- ✓No one to walk with? Come make some new friends!
- ✓Don't like to sweat? Hard to develop muscles without glistening a little!
- ✓No special shoes? The track is cushioned and clean. The bunnies and birds are an extra bonus.
- ✓No more excuses? Good! Start today, continue tomorrow.

By next New Year's Day, you won't need more resolutions. The ones you started will be healthy new habits. Now, that's something to celebrate! To your health!!

Are we ready to give Herbal remedies to children? (con't from Page 1)

investigated, 83 (32%) contained undeclared pharmaceuticals or heavy metals, and 23 had more than one adulterant.

False authentication can be another problem with plant derived medicines. Whether accidental or intentional, misidentification of plant preparations is commonly linked to the ingestion of toxic agents. Still poisoning can result from the natural chemistry of the plants themselves, as their chemistry exists to support their own continuation, not ours. Random testing of various supplements, undertaken by scientists, consumer groups, or newspapers, indicates that many dietary supplements do not carry the amount of active ingredient stated on the label. According to pharmacologist Varro Tyler, herbal product consumers have less than a 50% chance of receiving a product that is accurately labeled. And, of the products that are accurately labeled, fewer yet offer the substance shown to be effective in medical studies. Although these variants are not necessarily unhealthy, they may not provide the same benefit demonstrated in clinical trials.

Susceptibility to poisoning can vary with age, gender, state of health, and

concomitant use from other drugs. The unique physiology of children makes them more prone to adverse effects than adults. Herbal toxicity can occur over time when a person has exceeded their threshold. This puts children at a greater risk of poisoning due to their smaller



body mass. Our knowledge of drug/herb interactions is limited and current measures taken to prevent harmful interactions are still in a preliminary stage.

Even if a product happens to be accurately labeled and contain the right active ingredients, in most cases little scientific evidence exists to verify the correct dosage necessary to bring about the suspected physiological response in adults. Adding children's smaller size and slower metabolism of drugs to the equation, makes efforts to provide an accurate dosage for children guesswork, at best. And, by doing so, children are

subjected to a system that can not take their specific healthcare needs into account.

No more than 20 percent of all drugs marketed in this country are labeled for use by children. Yet, at least here the amount of guesswork is limited to the pediatrician's ability to extend information that is based on medical studies and clinical experience to meet the unique needs of each patient. Pediatricians prescribe products that have verifiable outcomes in adults and undergo more stringent quality management. Still, continued efforts are necessary to ensure that the drugs currently used to treat children are also tested for use in children.

Harm due to dietary supplements is greatly underreported. According to a March 2000 report in the Washington Post, there is a disparity between the number of adverse events reported to the FDA's Special Monitoring System and the American Association of Poison Control Centers (AAPCC). From 1993 to 1998, the FDA accumulated 2,621 adverse events with 184 deaths. In 1998 alone, the AAPCC received 6,914 adverse event reports due to supplements, 64% of which were from

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Herbal Remedies (con't.)

children under 6 years of age. These reports don't include the unknown number of children presenting nonspecific chronic effects, e.g. hepatitis, which may be ascribed to other causes.

In 1993, three unrelated children took Jin Bu Huan (a Chinese herbal medicine used for treating pain in children) and had severe adverse health effects, one ending in fatality.

Following investigation, the product's potential for toxicity was found to have resulted from a combination of factors: the extreme potency of its active ingredient, L-THP; the misidentification of the plant from which the product was derived; the false and potentially misleading medical claims; the general availability of the product; and lack of childproof packaging. These factors pertain to many herbal products on the market today.

More should be done to prevent life-threatening occurrences, like this one before herbal remedies and other types of dietary supplements can be considered safe for children.

Until action has been taken to substantiate and safeguard the use of herbal remedies, administering them to infants or children can not be considered a responsible practice.

References:

- 1) Huxtable, RJ, PhD. "The Myth of Beneficent Nature: the Risks of Herbal Preparations." *Annals of Internal Medicine*. July 15, 1992; 117:165-6.
- 2) 1995 National Council for Reliable Health Information position paper on Over-the Counter Herbal Remedies.
- 3) "Advice about Herbal Therapies." *The Review of Natural Products*. December, 1998.
- 4) Shari Roan. "Quality Control for Herbs, Vitamins." *Los Angeles Times*. February 7, 2000.
- 5) Jeralde Foote, MS, RD, and Bruce Renegers, PhD, RD. "Maternal Use of Herbal Supplements." *Nutrition in Complementary Care, a Dietetic Practice Group of the American Dietetic Association*. Winter, 2000; Vol 2, No. 2
- 6) Guy Gugliotta. "Diet Supplement Marketers Target Kids." *Washington Post*. July 18, 2000; A01
- 7) Center for Disease Control, Morbidity and Mortality Weekly Report. *Epidemiologic Notes and Reports Jin Bu Huan Toxicity in Children--Colorado*, 1993. Vol 42 (33) ; 633-36. August 27, 1993. www.cdc.gov. Accessed October 17, 2000.
- 8) Donna Schuster, MD, FAAP, American Academy of Pediatrics. Press Statement on The Better Pharmaceuticals for Children Act. Released May, 7, 1997. www.aap.gov. Accessed October 18, 2000.
- 9) Edzard Ernst, MD. "Harmless Herbs? A Review of the Recent Literature." *The American Journal of Medicine*. February, 1998, Vol 104: 170-178.
- 10) Ko RJ, "Adulterants in Asian patent medicines," *New England J Med*, 1998; 339:847.

Medical Misconceptions and Deceptions

by Tim Gorski, MD

National Council Against Health Fraud

FRAUDULENT RECALL NOTICE ISSUED



An apparently nationwide mailing was made in August of oversized, official-looking window envelopes bearing the words "Medical Recall Notice, Open Immediately," and in bright red letters, "Drug Recall Warning Enclosed." Enclosed documents blared additional warnings: "Your Health Is At Risk! Immediate Action Required!" and in a large box, "You may be taking prescription drugs that have been determined to be hazardous to your health."

"A safer, more effective, less expensive, nonprescription treatment, without harmful side effects, has been clinically proven, and you should begin using it as soon as possible," the notice claims. A long list of disorders are then detailed, some listed twice, that are supposedly caused by standard estrogen/progestin hormone replacement therapy. "Up to 90% of estrogen is destroyed in the liver. Estrogen Replacement Therapy stops working in 5 to 7 years for most women."

A smattering of mostly irrelevant citations from scientific literature also appears, and it is claimed that the "safer" alternative "has no harmful side effects (like estrogen), and has more healthful benefits, including: Natural weight loss, increases sex drive, no more breast tenderness, stops menstrual pain, and returns youthful skin. Stops PMS and it's

associated depression, mood swings, and migraine headaches. Stops menopausal symptoms, including hot flashes and dryness. Reverses osteoporosis, and builds bone back."

The "safer" product turns out to be "The Miracle Cream's Natural Progesterone Cream" which it turns out, can be ordered from "Health Notification Service" in Henderson, Nev. which issued this "Medical Recall Notice." The mailing includes an audiotape pitching the same nonsense.

In the first place, there has been no recall of standard estrogen/progestin hormone replacement therapy (HRT). Nor is there any evidence or reason to suppose that "The Miracle Cream's Natural Progesterone Cream" offers benefits comparable to, let alone superior to, standard HRT regimens. In addition, the facts are that:

- HRT has been shown to protect against osteoporosis, fractures, and even tooth loss.
- Estrogen/progestin HRT does not increase the risk of uterine cancer.
- HRT reduces the risk of colon cancer.
- HRT improves sexual function.
- HRT appears to improve cognitive function and may reduce the risk of Alzheimer's disease.
- HRT does not cause weight gain. In fact, it may reduce the accumulation of abdominal fat common in older women.
- HRT offers benefits at any age and does not stop working in five to seven years.
- HRT does not significantly increase the risk of breast cancer, if it increases it at all.

It definitely does not increase mortality from breast cancer, in part because women on HRT have been found to have smaller and less aggressive tumors that respond better to treatment. In addition, the risk of breast cancer is influenced much more by hormonal changes that occur earlier in life and which are fixed by the time a woman becomes a candidate for HRT. It is well known, for example, that women whose periods began at a young age or who either did not have children or who had them late in life are at significantly greater risk of breast cancer.

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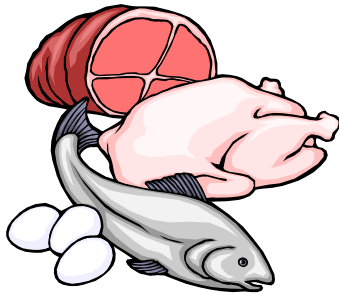
Sports and Creatine Supplement

by Isabel Simard, RD

Orange County Health Care Agency

Around the world, people seek ways to perform better than others do. Creatine, a supplement used for athletic training as well as by people wanting to increase muscle mass and performance, has been available for a number of years.

Unfortunately, man thinks that if a small amount of chemical can help in performance, more will work even better. Creatine is usually used as a supplement. Most studies have observed it to enhance performances during brief periods of high-intensity exercises (<30 seconds). It is believed that increased creatine lowers the recovery time between exercise repetitions. It is naturally present in the body and in food, such as red meat, fish, eggs and milk, and synthesized in the liver, kidney and pancreas.



The daily needs are approximately 2g (1 g is provided by food and the rest is synthesized by the body). Approximately 120 to 140g of creatine are found in the skeletal muscles. The maximum dosage a human being can tolerate is approximately 160 g. Creatine maintains homeostasis of the metabolism in the muscles. It is essential in energy production, and when reserve decreases, performance decreases as well. When the body metabolizes creatine, it is transformed into creatinine, which is excreted by the kidneys.

Creatine is available as a white powder or as capsules. Each teaspoon of powder contains 5 g of creatine. American companies are currently trying to find other ways to market creatine, such as creatine chewing gum, which would contain 1 g of creatine. Creatine

can be found in specialized athlete stores, health food stores, and is now found in pharmacies.

The dosage used among most studies is 20-25 g of creatine for 5 to 7 days, followed by 2 gm a day to maintain constant concentrations. An important increase of the creatine reserves is achieved during the first few days of utilization. After 3-4 days, no increase of creatine within the muscles was observed, and the kidneys excreted the remaining. The creatine found in this 20-



25 gm of powder represents 4-5 kg of raw ground meat or 40 eggs. Consumer Lab tested 13 products and 11 contained pure creatine and the amount indicated by the manufacturer was respected.

Up to this day, no study was conducted regarding creatine and drug interaction. However, a negative effect was found when used with caffeine. The ergogenic effect of creatine would be totally eliminated by caffeine. Many athletes take caffeine thinking it will enhance their performance. In fact, it leads to exhaustion faster. More than 5 cups of coffee a day may even produce urinary caffeine levels unacceptable for competition. Finally caffeine can also increase the risk for dehydration and upset the stomach.

Most studies agree that short-term effects are currently more or less documented. However people suffering from renal insufficiency must avoid creatine. Long term damage of the kidney function might occur. Up to this day, no increases in heart beat rates have been reported secondary to the intake of this supplement. A weight gain of 0.6 to 2.0 kg has been observed with the consumption of creatine.

This gain is most likely due to water retention initially followed by an increase of strength and lean body mass. On a long-term basis, there seems to be no increase in body fat.



Regardless of uncontrolled daily dosage and long-term administration, research on the safety of prolonged creatine supplementation has not been addressed, thus remains unknown.

Creatine supplementation should be taken under medical supervision, an amount higher than 6 gm per day is considered as a therapeutic intervention rather than a dietary supplement. Physicians also suggest caution before using this product. Use of creatine goes against the legislation of anti-doping of the International Olympic Committee which describes doping as the use of a substance in abnormal quantities with the intent of artificially and unfairly enhancing sport performance.

References:

1. Williams M.H. The Ergogenics Edge: Pushing the Limits of Sports Performance. Human Kinetics, Champaign, IL. 1998:p.178-182.
2. Benzi G. Is there a rationale for the use of creatine either as nutritional supplementation or drug administration in humans participating in a sport? *Pharmacol Res* 2000;(3):255-264.
3. Feldman E.B. Creatine: a dietary supplement and ergogenic aid. *Nutr Rev* 1999;(2):45-50.
4. Juhn M.S., Tarnopolsky M. Oral creatine supplementation and athletic performance: a critical review. *Clin J Sport Med* 1998;(4):286-297.



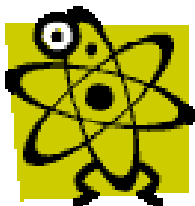
HEALTH HYPE TRIVIA

By: Don Paulin

Test your nutrition quackery
knowledge

Try to answer the following:

Which veterinarian/naturopath claimed to have been nominated for a Nobel Prize (it was news to the Nobel Nominating Committee) and distributed millions of scientifically questionable audio tapes entitled "Dead Doctors Don't Lie"?



Answer:
Joel Wallach

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Xenical (Orlistat): New Medication to Treat Obesity?

by Isabel Simard, RD

In the United States 20% of men and 25% of women are suffering from obesity, which is influenced by the metropolitan area, the regional differences in lifestyle, ethnicity, income, and food availability. Obesity is a chronic condition, which is recognized as a public health problem worldwide. It is well known to increase the incidence of type 2 diabetes, cardiovascular disease (CVD), hypertension, and certain types of cancer as well as premature death. Some researchers have shown that a 10% weight loss can improve significantly the diseases associated to obesity.

Xenical, also known as Orlistat, approved by the FDA in April 1999, is a medication used to help obese people lose weight. A 120-mg capsule of active ingredient must be ingested before every meal. Once in the intestine, this medication blocks some of the fat eaten from being absorbed. The fat is then excreted from the body via the bowel movement, resulting in fatty stools. While taking this medication, studies agree that a hypocaloric (500 fewer calories than usually consumed) well balanced diet is necessary to obtain results. Researches show that a hypocaloric diet leads to a 1/2-1 lbs.-weight loss per week. A study showed that participants who were on Xenical did not gain the weight they had lost after stopping the medication. But, a long-term weight maintenance is unknown, since studies were relatively short (the longest lasted 2 years, but most of them were conducted in less than a year).

Xenical is indicated in conjunction with a mildly hypocaloric diet for the treatment of obese patients with a body mass index (BMI) greater or equal to 30 kg/m², or overweight patients (BMI 28 kg/m²). Treatment with Xenical should only be started if diet alone has previously yielded a minimum weight loss of 2.5 kg over a period of 4 consecutive weeks. Treatment with Xenical should be discontinued after 12 weeks if patients have been unable to lose at least 5% of their body weight. Xenical was also found to help maintain blood sugar levels among a population suffering from non-insulin dependant

diabetes. Some studies have reported an improvement of the lipid profile in patients on Xenical.

Undesirable manifestation reported by participants in different studies conducted on Xenical are: fatty/oily stools, oily spotting, soft stool, liquid stools, abdominal pain, increased defecation, fecal urgency, flatus discharge, fecal incontinence and oily



evacuation. In most studies, more than 50% of subjects experienced one or more of these side effects. Some participants even quit the experiment due to the side effects. Another important aspect is that the longest study effectuated on Xenical only lasted 2 years, which indicates that long-term effects are currently unknown. Furthermore, many of these studies were financed or paid for by Hoffmann-LaRoche, distributor of Xenical and may be biased. Further investigation is required on long-term management of obese subjects receiving Xenical.

A well balanced diet, accompanied with regular physical activity alone should lead to weight loss, as well as help maintain weight. Modest weight loss will reduce risk factors for diseases associated to obesity, rather than achieving ideal weight. **To lose weight without endangering your health or even your life, consult a Registered Dietitian or Medical Professional.**

References:

1. Rothacker and Blackburn. Obesity prevalence by age group and 5-year changes in adults residing in rural Wisconsin. J Am Diet Assoc. 2000;100:784-790.
2. Mertens and Gaal. Overweight, Obesity, and Blood pressure: The effects of modest weight reduction. Obes Res 2000;8:270-278.
3. Sjostrom, Rissanen, Andersen, Boldrin, Golay, Koppeschaar, Krempf. Randomised placebo-controlled trial of Orlistat for weight loss and prevention of weight regain in obese patients. The Lancet 1998;352:167-172.
4. Zavoral. Treatment with Orlistat reduces cardiovascular risk in obese patients. J Hypertens 1998;16:2013-2017.

Medical Misconceptions (con't. from Page 3)

For these women, it may be more risky to go without HRT because if they do get breast cancer, their prognosis may not be as good. Fortunately, most women will not die of breast cancer. Most women will die of cardiovascular disease. There is some evidence for, and more recently, some evidence against the hope that HRT can reduce the risk of heart disease.

What is known is that HRT, especially when it is taken orally so that it passes first to the liver, improves blood lipid profiles. That is, it reduces LDL "bad" cholesterol and increases HDL which is considered the "good" cholesterol.

Oral contraceptives, which are also combinations of estrogen/progestin, can



cause menstrual and mood changes, breast tenderness, and gastrointestinal symptoms. Much less common problems include hypertension, gallbladder disease, headaches, thrombophlebitis, and carbohydrate intolerance. But these risks are much higher in pregnancy, (for which no prescription is necessary) when enormous amounts of estrogens and progestins are produced normally. HRT, by contrast, consists of a tiny fraction of the hormones present in birth control pills. In fact, the "R" for "replacement" in HRT is a misnomer since HRT does not even raise a woman's hormone levels to premenopausal values. Accordingly, it is rare - very rare - for women to experience such problems as a result of HRT. There is no evidence - none - that HRT causes or worsens these conditions.

Finally, HRT reduces mortality from all causes. Women on HRT simply live longer, which is not terribly surprising since normal female physiology depends on the presence of estrogen. Even breast cancer, when it occurs, appears to be less deadly in the presence of HRT.

By contrast, progestins, whether natural or synthetic, do not offer the benefits of estrogen or do so only to a greatly attenuated degree. Progesterone does not "reverse osteoporosis" or "build bone back." It does not "increase sex drive." In fact, it tends to reduce libido. Progestins, both natural and synthetic, tend to increase appetite and, thus, weight gain. They also can cause hair loss (by synchronizing the growth cycles of hair follicles), mood changes, and



fatigue.

Had the authors of this "Medical Recall Notice" cared to, they could also have reproduced the FDA-approved package labeling for prescription progesterone, the very same ingredient in their "'Miracle Cream' Natural Progesterone Cream." The list of adverse effects include dry mouth, chest pain, fever, hypertension, confusion, somnolence, speech disorder, constipation, dyspepsia, gastroenteritis, rectal bleeding, hiatus hernia, vomiting, earache, palpitations, swelling, arthritis, muscle pain and cramps, anxiety, impaired concentration, insomnia, personality disorder, vaginal discharge and infection, vaginal dryness, uterine fibroids, abscesses, herpes, bronchitis, nasal congestion, sore throat, sinusitis, acne, wound-healing problems, urinary tract infection, abnormal vision, and cause enlarged lymph nodes.

If it is ridiculous to suppose that this laundry list of ailments should deter women from taking prescription progesterone medications when indicated and prescribed, it is just as ridiculous to give credence to the scare tactic claims of the perpetrators of this "Medical Recall Notice." In fact, it is more ridiculous, since the benefits of HRT for most women are so important, so clear and also so well established.

Osteoporosis alone is a major public health problem that affects nearly 30 million American women and is a causative factor in more than 1.5 million bone fractures annually. As the population ages and more people live longer, these numbers are expected to grow. White women are especially vulnerable and can expect to lose, as a result of small cumulative spinal fractures, an average of 2 inches in height.

Other women at increased risk include those who experience early menopause for any reason. By age 90, 20 percent of all women will have sustained a hip fracture, which carries a six-month mortality risk of 17 percent. The estimated direct costs of osteoporosis have been estimated at \$14 billion. While exercise, calcium, and vitamin D certainly help to preserve bone mass, HRT offers additional benefits that these interventions cannot provide.

These facts, as well as the additional proven or potential benefits of HRT, make it absolutely irresponsible for anyone to make false statements about or misrepresent the safety of these medications. A mailing such as this could be considered as much of a crime as one that deceptively implies that one



has won a sweepstakes. The intent is clearly to make a profit not simply by persuading victims to purchase an unproven remedy, but by inducing them to discontinue important and needed medications, the harmful results of which may not be apparent for many years. Unfortunately, thanks to Congress, whether it is illegal is open to question.